



2010

Cognitive-Behavioral Therapy with Youth

Sarah A. Crawley

Jennifer L. Podell
Temple University

Rinad S. Beidas
University of Pennsylvania, rbeidas@upenn.edu

Lauren Braswell

Phillip C. Kendall
Temple University

Follow this and additional works at: http://repository.upenn.edu/psychiatry_papers

 Part of the [Child Psychology Commons](#), [Cognitive Behavioral Therapy Commons](#), and the [Psychiatry and Psychology Commons](#)

Recommended Citation (OVERRIDE)

Crawley, S.A., Podell, J.L., Beidas, R.S., Braswell, L., & Kendall, P.C. (2010). Cognitive-Behavioral Therapy. In Dobson, K. (Ed.), *Handbook of Cognitive-Behavioral Therapies*, (pp. 375-410). New York: Guilford Press.

At the time of this publication, Dr. Beidas was a doctoral student at Temple University, but she is now a faculty member of the University of Pennsylvania.

This paper is posted at ScholarlyCommons. http://repository.upenn.edu/psychiatry_papers/18
For more information, please contact repository@pobox.upenn.edu.

Cognitive-Behavioral Therapy with Youth

Abstract

Cognitive-behavioral therapies (CBTs) with children and adolescents use enactive, performance-based procedures, as well as cognitive interventions to produce changes in thinking, feeling, and behavior. Various forms of CBT have a common goal to help the child develop a constructive worldview and a problem-solving attitude. The problem-solving orientation can also be referred to as a "coping template." Through the provision of carefully planned experiences, CBT helps the child and family build an adaptive, problem-solving perspective.

Disciplines

Child Psychology | Cognitive Behavioral Therapy | Psychiatry and Psychology

Comments

At the time of this publication, Dr. Beidas was a doctoral student at Temple University, but she is now a faculty member of the University of Pennsylvania.

Cognitive-Behavioral Therapy with Youth

Sarah A. Crawley
Jennifer L. Podell
Rinad S. Beidas
Lauren Braswell
Philip C. Kendall

Cognitive-behavioral therapies (CBTs) with children and adolescents use enactive, performance-based procedures, as well as cognitive interventions to produce changes in thinking, feeling, and behavior. Various forms of CBT have a common goal to help the child develop a constructive worldview and a problem-solving attitude. The problem-solving orientation can also be referred to as a “coping template.” Through the provision of carefully planned experiences, CBT helps the child and family build an adaptive, problem-solving perspective.

CBT with children and adolescents continues to experience expansion and refinement. A number of edited volumes, meta-analyses, treatment manuals, and research studies have informed readers of the potentially beneficial gains associated with CBT for youth (e.g., Hibbs & Jensen, 2005; Kendall, 2006; Weisz, McCarty, & Valeri, 2006; Kendall & Hedtke, 2006a, 2006b; Pediatric OCD [Obsessive-Compulsive Disorder] Treatment Study Team, 2004). The outcome literature on CBT with youth has breadth and depth, and continues to be developed (e.g., Kendall, Choudhury, Hudson, & Webb, 2002). Yet despite this excellent growth, questions remain. There is a need for carefully executed outcome studies with children if the field is to develop a more truly evidence-based approach to practice. In the sections that follow, the differences between working with youth and with adults are considered.

The major components in CBT with children are then described, and applications of CBT to specific childhood disorders are discussed. The chapter concludes with a consideration of CBT for special populations, current issues within CBT research, and questions for future research.

DEVELOPMENTALLY INFORMED DIFFERENTIATIONS IN TREATMENT

There are differences that must be taken into consideration when treating children and adolescents compared to adults. Treatment must be implemented in a developmentally appropriate fashion to be effective. Factors that are particularly relevant to how one conducts CBT with youth include (1) recognition of how young clients come to treatment, (2) use of age-appropriate modes of delivery, (3) sensitivity to the client's cognitive and affective development, (4) awareness of the social context in which the youth is embedded, and (5) clarity about the therapist's role and expectations for therapy.

Entry into Therapy

The referral source has important clinical implications, because seeking help for oneself is very different than being sent for services by someone else. Other individuals, such as parents or teachers, typically initiate psychological services for children and adolescents. Children and adolescents are not known for their eagerness or even willingness to sit and talk about problems with an adult. Quite the contrary may be true: Children and adolescents may be impulsive, limited in their self-reflection, or nondisclosing in conversations with adults. It is essential that efforts be made to create a pleasant affective environment, so that children and adolescents may come to enjoy the experience and want to be in treatment.

Value of Age-Appropriate Modes of Delivery

One way to implement psychological treatments that include verbal exchanges, learning, working collaborations, and sharing of emotional experiences with youth involves the use of play-related activities in treatment. As stated by Kendall, Chu, Gifford, Hayes, and Nauta (1998), the effective therapist can both teach in a playful manner and play in a way that teaches. Being able to make skillful use of age-appropriate play activities accomplishes three important objectives: (1) It fosters a positive therapeutic relationship; (2) it can create a window for more direct observation of the child's operating expectations and beliefs; and (3) these activities can be vehicles to introduce and develop more adaptive behavior and more constructive thinking about issues that are troubling to the child. Pragmatically, this work can be done by incorporating

games and fun activities into the treatment, such as role plays, charades, various art activities, and selected board games. With young children, the use of puppets or dolls can be a useful precursor to more direct dramatic role plays of targeted situations.

Attention to Level of Cognitive, Emotional, and Social Development

In addition to making developmentally sensitive choices in the use of play methods, consideration must also be given to the youth's cognitive and affective development, including memory and attention capacities, verbal fluency and comprehension, and the capacity for conceptual reasoning. Cognitive strategies that may be appropriate for adult clients may not be fully understood and managed by young clients, and it is essential that material be presented to the child in a developmentally appropriate fashion. For example, although a child may not have the cognitive maturity to distinguish between rational and irrational thoughts, he or she may be able to understand that certain events are more or less likely to happen. Children can be coached to collect evidence for the possibility that the event they are thinking about will actually happen. Through this exercise they may be able to determine the likelihood of the event occurring and conceptually come to understand the difference between rational and irrational thoughts.

A central issue concerning cognitive processing is the differentiation between cognitive deficiency and cognitive distortion in processing. Processing "deficiencies" refer to the absence of thinking (i.e., lacking careful information processing where it would be beneficial), whereas "distortion" refers to dysfunctional thinking. Youth with externalizing problems show deficiencies in processing, whereas those with internalizing problems tend to have more maladaptive, distorted processing. This distinction can help the clinician to target the specific nature of the dysfunction or work to identify the distortion. It is also important to recognize the role of processes, such as expectations, attributions, self-statements, beliefs, and schemas, in the development of emotional and behavioral patterns. Effective programs for children and adolescents intentionally plan and capitalize on creating behavioral experiences with intense positive emotional involvement, while paying attention to the anticipatory and after-the-fact cognitive activities of the participants. The therapist guides the child's attributions about prior behavior and emotions, and his or her expectations for future behavior and emotions, which allows the child to acquire a cognitive structure for future events.

Awareness of psychosocial development is important, because children and adolescents face different issues. Academic matters become important and stressful for adolescents, and dating and interpersonal relations take on increasing importance. These themes must be laced into treatment to address the teen's growing need for autonomy from parents. Treatment programs must be designed accordingly.

Therapist's Role and Expectations

The cognitive-behavioral therapist who works with children fulfills multiple roles, including diagnostician, consultant, and educator, often to both child and parent (Kendall, 2000). As diagnostician, the therapist integrates data about a particular client from a variety of sources and combines this information with knowledge of normal child developmental processes and psychopathology to create a problem formulation. As a consultant, the therapist shares the problem formulation and the knowledge of the costs and expected benefits of different treatment options with the family to prioritize treatment goals and make choices about treatment strategies. Depending on the treatment options selected, the therapist then provides education about the child's disorder and training in the needed skills areas to the child and/or parents. In general, the cognitive-behavioral therapist can be likened to a "coach" for the child and/or the family (Kendall, 2000). The coaching analogy helps the child understand that the therapist may be intensively involved with him or her for a given period of time and except in more unusual cases, is unlikely to be part of the family's support system for years to come.

In addition to managing the child's expectations regarding the therapist's role, therapists who work with youth must take special care in their own treatment expectations. Reasonable therapist expectations include the belief that interventions will help the child move toward successful adjustment, and that the child who acquires skills in therapy will at some time experience the benefit of those skills. It is not reasonable to expect that any child, with any problem, can be "fixed" using CBT or other psychotherapies. It is reasonable for the therapist to hold that therapy does not "cure" maladaptation, but it helps with the management of psychopathology. Child clients also do not always display their newly acquired skills right away. Sometimes, children act as if they were right all along, and do not want the therapist to know they have learned from their therapeutic interactions, or benefited from therapy. It is important for therapists to recognize that this behavior may be developmentally appropriate.

Recognition of the Social Context of Treatment

All clients function in a social context, but since children and adolescents are not capable of full independence, it is critical to consider the child's contextual influences. The recognition of the role of parents and other powerful people in the child's life, and the inclusion of these individuals in some aspect of the intervention process, is often crucial for the successful treatment of a young client. Parents can serve as "consultants" when they provide information about the child's behaviors, "collaborators" when they assist in the implementation of program requirements, and because parents often contribute to or maintain some aspect of the child's problem, they can be involved as "coclients" in the treatment itself (Kendall, 2000).

The nature and benefits of including parents in the treatment of youth with behavioral and emotional problems vary across child problems and with development. Parents of youth with conduct disorders often monitor their children's activities a lot, whereas parents of anxious youth are less vigilant in overseeing their children. Improvements in children's adjustment and symptoms may increase when parents are included in sessions, or when parents are intentionally separated from their children (Barmish & Kendall, 2005). Younger children may benefit more when parents are included as part of the treatment from the beginning, whereas an adolescent may benefit more when the parent is not included in treatment sessions. Further research is needed to inform the ideal involvement of parents and to examine the different parent roles relative to factors such as the child's age and principal disorder.

COMMON TREATMENT COMPONENTS

CBT varies according to the age of the child and the presenting problem, but several strategies are common in this approach to treatment (Kendall, 1993). In this next section, we discuss problem solving, cognitive restructuring, self-regulation, affective education, relaxation training, modeling/role playing, and behavioral contingencies. Following these discussions, we consider the applications of the strategies to specific childhood disorders.

Problem Solving

Problem solving, a key component of CBT, is common across different types of childhood disorders. Problem-solving training has a rich history of applications with both children and adults. During the 1970s, there were dramatic increases in attempts to formulate problem solving as a set of relevant skills for clinical endeavors (e.g., D'Zurilla & Goldfried, 1971; Mahoney, 1977; D'Zurilla & Nezu, 1999). Spivack, Platt, and Shure (1976) hypothesized that effective interpersonal, cognitive problem solving demands a number of sub-skills, such as sensitivity to human problems, the ability to generate alternative solutions, the capacity to conceptualize, the means to achieve a given solution, and sensitivity to consequences and cause-effect relationships in human behavior (Shure & Spivack, 1978; Spivack et al., 1976).

Teaching them how to solve problems allows children to gain confidence in their ability to resolve daily struggles that once may have seemed hopeless. For example (see Figure 12.1), with an anxious child, the first step in problem solving is to examine a non-anxiety-provoking situation, such as not being able to find one's shoes in the morning before school. The child works with the therapist to come up with a number of solutions (e.g., go to school barefoot, walk on one's hands to school, not go to school, wear slippers); then the child can evaluate each option before picking one. Once the child is able to implement problem-solving skills in a non-anxiety-provoking situation, he or she

Now list some of the possible things you could do. Ask yourself: "What can I do to make this situation less fearful?"

1. _____
2. _____
3. _____

Next you need to choose the best ideas for you. Focus on each possibility. Ask yourself:

"What might happen if I choose the first idea?" _____

"How would I feel?" _____

Now we'll go through the same process with your second and third possibilities. Ask yourself:

"What might happen if I chose the second idea?" _____

"How would I feel?" _____

Ask yourself: "What might happen if I chose the third solution?" _____

"How would I feel?" _____

Now you have thought about each possibility.

Which one do you think might be the best one for you?

FIGURE 12.1. Problem-Solving Worksheet. From Kendall and Hedtke (2006b). Copyright 2006 by Workbook Publishing. Reprinted by permission.

can practice problem solving for a feared situation (e.g., public speaking for a socially phobic youth).

Problem-solving training approaches have attained positive outcomes when used as a component in the treatment of difficulties experienced by children and adolescents, including anxiety (Kleiner, Marshall, & Spevack, 1987). Problem solving with a child who displays aggression might focus on the determination of appropriate ways to communicate anger and to acquire desired objects from others in a prosocial way (Lochman, Powell, Whidby, & Fitzgerald, 2006). With depressed children, problem-solving training might be used to help the youth take action to change distressing situations that lead to unpleasant affect (Stark et al., 2006).

In addition to differences in the kinds of problems experienced by children who manifest different disorders, different disorders are associated with certain difficulties with the problem-solving process. For example, children who are prone to aggression or acting-out difficulties may need training and support in the problem formulation phase due to their tendency to misperceive the intentions of others and overperceive hostility in their social environment (Dodge, 1985). They may also need help to slow themselves down during the alternative generation phase, so they can generate nonaggressive alternatives to address the problem situation. Children who are depressed may need special encouragement to use problem solving, because negative thinking may interfere with the application of problem-solving skills (e.g., "Why do this, since nothing is going to change anyway?"). Problem-solving training is conceptualized as a flexible vehicle that can be easily adapted to the needs of individual clients and their families.

Cognitive Restructuring

Research suggests that children who display emotional and behavioral concerns engage in various forms of negative cognition about the self (Crick & Dodge, 1994; Kendall, Stark, & Adam, 1990; Rabian, Peterson, Richters, & Jensen, 1993). Cognitive-based therapies aim to ameliorate these negative cognitions by identifying and testing maladaptive thoughts. Cognitive restructuring methods (e.g., Beck, Rush, Shaw, & Emery, 1979; Ellis & Harper, 1975) were developed to address these negative cognitive representations in adults, including expectations, beliefs, and self-statements. When using these techniques, therapists first help the client become aware of self-statements, expectancies, or beliefs that reflect unhelpful ways of thinking about the self, the world, and/or the future, then guide the client to consider the connection between these negative thoughts and the client's emotional experience. Finally, therapist and client collaborate in various ways to identify, create, and test more adaptive ways of thinking.

When working with children or adolescents, the basic elements of cognitive restructuring are similar to those used with adult clients, but with careful

consideration of the developmental level of the child. Harter (1982) noted that children younger than 5 or 6 years of age are usually not interested or capable of reflection upon, or metacognition about, their thoughts and/or thinking processes. Over the elementary school years, this capacity for self-reflection develops as children examine thoughts about issues that are highly salient and current in their lives. It is probably not until adolescence that clients can fully examine thoughts as examples of broader schemas that have developed over time and as a result of specific experiences.

When conducting cognitive restructuring with children, therapists often introduce the notion of examining one's thinking by having the child fill in "thought bubbles" over the heads of cartoon characters facing various scenarios (e.g., filling in the thought for a cartoon child who has just spilled a lunch tray; see Kendall & Hedtke, 2006a, 2006b; see Figure 12.2). When the child understands that thoughts accompany actions and feeling states, the therapist may then ask the child to keep a simple diary of a particular kind of thought, such as a self put-down or other type of negative self-statement relevant to the child's presenting concerns. The therapist then guides the child to consider the connection between these negative thoughts and unpleasant emotions, perhaps having the child conduct mood ratings in connection with his or her thought monitoring. Through guided questioning, and designing and conducting behavioral experiments, the clinician then introduces the possibility that one could choose to think differently about the matter at hand, and

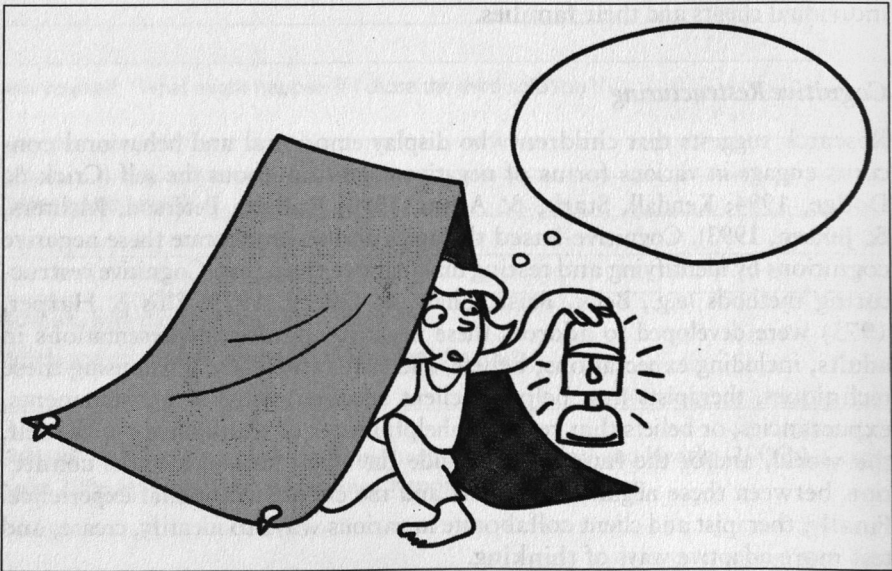


FIGURE 12.2. Example of a thought bubble. From Kendall and Hedtke (2006b). Copyright 2006 by Workbook Publishing. Reprinted by permission.

that thinking differently could lead to feeling differently. This process helps children pull themselves out of negative thoughts, or the “negative muck” (Stark et al., 2006).

In addition to uniquely child-focused examples of cognitive restructuring, efforts more like those associated with Beck’s cognitive therapy for depression have also been employed with children and adolescents (Dudley, 1997; Stark, 1990; Wilkes, Belsher, Rush, & Frank, 1994). The therapist elicits negative self-statements in various ways, and the child and therapist then collaborate to examine the evidence that supports or refutes this negative interpretation. The question “What’s the evidence to support this view?” is a basic tool of cognitive restructuring. With a second question, “Is there another way to look at this observation?”, the therapist helps the child explore alternative explanations that could account for his or her troubling observations (e.g., a friend did not say hello in the hallway). A third common question used in cognitive restructuring involves asking “What if . . . ” or, put another way, “Even if the observation is true and there’s not an alternative explanation, is this really so terrible?” (e.g., “Your friend didn’t say hello. She is mad at you but, even so, is that the worst thing ever?”; Stark et al., 2006). Beyond these standard questions, the therapist may also help the child formulate a behavioral experiment to gather evidence for or against a particular viewpoint. For example, if a child is worried that other children will make fun of her, she may survey others to test the belief that she is the only person being targeted. The targets of cognitive restructuring tend to vary with the presenting difficulties of the child. For example, in anxiety disorders, the therapist is likely to explore maladaptive expectations or worries related to upcoming events, with the goals of removal of misinterpretations of environmental events, and the development of coping strategies. These goals allow youth to view formerly distressing situations through the lens of coping strategies rather than the previous misperceptions (Kendall & Suveg, 2006). With depressed clients, there is more of a tendency to ruminate and form misattributions about past events. Thus, the therapist helps to identify the child’s core beliefs, and directly and indirectly challenges negative thoughts to help replace them with more realistic and positive thoughts (Stark et al., 2006).

Affective Education

Although affective education has implicitly been a part of most CBT programs, more recently there has been an explicit focus on the role of emotions in child and adult psychopathology treatment (see Kendall & Suveg, 2007). An important component of CBT is therefore to help children and teens learn how to recognize, label, and express emotional experiences accurately. CBT prevention and treatment programs for youth benefit from the inclusion of direct affective education (Suveg, Southam-Gerow, Goodman, & Kendall, 2007). In some cases, children may be keenly aware of their emotional state but need help to develop a vocabulary to discuss these experiences, or as

Southam-Gerow and Kendall (2000) reported, they need help to recognize that emotions are modifiable. They may also need information to understand and normalize the physiological symptoms that accompany the experience of strong emotions. Other children need help to understand the range and intensity of emotional expression. These children often need to learn to recognize the early physiological cues of emotional distress, so they can respond to the problem creating this distress while their emotions are still at relatively low intensity, rather than wait until they experience some type of emotional "meltdown." Still other children need help in understanding the connection between thoughts and feelings, and benefit from learning how self-talk has the potential to increase or decrease the intensity of one's emotional response.

As part of affective education, the cognitive-behavioral therapist may explain that strong emotions have a disorganizing effect on thinking in both children and adults, which makes it difficult to exhibit new learning or behavior patterns, unless these behavioral responses have been well-practiced. Ideally, practice first occurs in a nonthreatening context that provides support to attempt new behavior, as in therapy, then in challenging environments. Sports or coaching analogies can be useful to communicate this concept. The therapist can explain that learning a new self-management skill is much like trying out a new soccer or basketball move. First, the child must work on the skill in practice and receive a lot of coaching, then try out in the moves in scrimmages, and finally use the new move in a game situation.

Relaxation Training

Relaxation training has been a key element in the behavioral treatment of internalizing difficulties in children (Barrios & O'Dell, 1989; Morris & Kratochwill, 1983), and teaching children more effective ways to relax is a major component of cognitive-behavioral treatment for a variety of childhood concerns. Rather than viewing relaxation as an alternative conditioned response, however, cognitive-behavioral therapists present relaxation as a coping skill to be developed and purposely enacted whenever needed. Relaxation training is an important element in the treatment of children and adolescents with anger management difficulties (Feindler & Ecton, 1986; Lochman, White, & Wayland, 1991). Stark (1990) has cautioned that children may not understand the rationale for relaxation training as well as adult clients. Children may feel intimidated by the procedures, so it is important for the clinician to provide adequate information to both the parents and child about the purpose and appropriate uses of relaxation methods.

Relaxation training has been implemented in many forms. Both Stark (1990) and Kendall et al. (1992) have recommended the use of Ollendick and Cerny's (1981) modification of deep muscle relaxation training, in which children learn to tense and relax various muscle groups and become more adept at perceiving the physiological indicators of muscle tension. Children can use this awareness to respond to early cues of muscle tension and enact their relax-

ation procedures. Koeppen (1974) created a series of guided images to help school-age children to tense and relax various muscle groups, and modifications of relaxation procedures have been developed for children with special needs (Cautela & Groden, 1978).

There are a number of simple relaxation training procedures that clinicians can use with preschool and school-age children. For example, Kendall and Braswell (1993) describe the robot-ragdoll game, in which the therapist and child first move around the room like robots, making their arms and legs very stiff and tense. Upon the therapist's signal, the child is then instructed to flop gently in a nearby chair and allow his or her arms and legs to be relaxed and loose. The therapist then contrasts these two bodily states. Children can also be taught brief inductions to slow deep breathing, such as when a child holds her index finger in front of her mouth as though it were a candle. The child is told to take a deep breath and hold it, and then let it out so slowly that an imaginary candle flame on the end of her finger will flicker but not be extinguished. Other methods include backwards counting or the use of calm self-talk. It is usually advised to present different options to relax, then have the child select and practice the methods he or she prefers. After relaxation skills have been taught and practiced in the session, the therapist can create an audiotape of the child's preferred methods for use at home. Although relaxation training is typically employed as one component in a multifaceted treatment plan, Kahn, Kehle, Jenson, and Clark (1990) reported that relaxation training alone was as effective as cognitive-behavioral treatment involving self-monitoring, cognitive restructuring, and problem solving in decreasing depressive symptomatology and increasing self-esteem.

Modeling/Role Playing

Modeling and role playing are two important components of CBT for youth. Humans often learn by observing others in a form of learning that is referred to as "observational learning" or "modeling." Modeling derives its conceptual roots from the social learning paradigm (Bandura, 1969, 1986), in which certain behaviors are demonstrated in a situation to illustrate appropriate responses for the child. Modeling has been used to reduce behavioral deficits and excessive fears, to facilitate social behavior (Bandura, 1969, 1971; Rosenthal & Bandura, 1978), and to teach desired coping skills. Variations of modeling include filmed, live, and participant modeling. In filmed modeling, for example, an anxious child might watch a videotape of a model coping with an anxious situation. The model (therapist) interacts with the child in participant modeling and guides his or her approach to the feared stimulus. Regular corrective feedback and reinforcement for effort and success are required to help the child match the performance of the model (Ollendick & Francis, 1988).

Modeling has received significant research attention. A learner's response to modeling is influenced by at least three classes of factors: features of the model, features of the learner, and consequences associated with the modeled

behavior (Goldstein, 1995). For example, models who verbalize their thoughts and actions while engaging in the behavior generate superior learning relative to models who do not verbalize (Meichenbaum, 1971). Verbalization demonstrates how the learner can think through a particular situation and provides both auditory and visual cues. Providing labels for actions may be particularly important, since young children tend to have greater difficulty differentiating central from peripheral information, and they may miss important contextual cues. Like adults, children are more likely to imitate behavior of similar models, or of someone they admire and respect. Youth can be helped to create their own models as well. As part of the treatment of anxious youth, Kendall, Chu, Pimentel, and Choudhury (2000) recommended having children imagine how their favorite cartoon or movie character might handle a feared situation.

"Coping models" may be superior to "mastery models" for some types of learning. A coping model demonstrates task performance that includes mistakes. The model may display some discomfort or distress, yet he or she is able to perform the task with persistent effort. Coping modeling shows the client how to execute the necessary behaviors, and also how to cope with thoughts, emotions, and behaviors that might interfere with task performance. A mastery model, in contrast, demonstrates successful performance without indications of anxiety or difficulty. The CBT clinician also works with parents and teachers to help them become more conscious models of the skills they wish to develop in the young clients.

Like modeling, role playing is used in CBT as a means to provide the client with performance-based learning experiences. Role playing also serves as a vehicle to assess the extent to which the client can produce the newly learned skills. Role plays in session typically involve the client and the therapist acting out various responses to problematic situations, which allows the child to be actively involved in the session and gives him or her the opportunity to model coping behaviors. Role plays can also serve as good practice for exposures, in which the young client is placed in a distressing situation and has to use newly acquired skills.

Behavioral Contingencies/Contingent Reinforcement

Shaping, positive reinforcement, and extinction are some of the most frequently used contingency management procedures. Behavioral contingencies within CBT are effective when their choice is guided by considerations of the youth's disorder and stage of development. Rewards tend to be tangible for younger children and connote social approval. Mastery incentives become increasingly important for older children, such as when rewards signify that the child has achieved some type of goal. Younger children may also require more frequent tangible rewards, whereas older children enjoy earning points toward a larger reward. Rewards and contingencies must also be sensitive to features of the child's disorder. For example, youth with attention-deficit/hyperactivity disorder (ADHD) exhibit a need for stimulation and quick sati-

ation; such youth tend to respond best in reward conditions with frequent rewards (Zentall, 1995).

It is important to consider the implementation of rewards and other contingencies away from the therapist's office. Parents need to use rewards in a consistent manner in the home setting. They must understand what constitutes a reward for a child. For example, many parents are unaware of the reinforcing power of their attention. A parent may not realize that if the child acts out and he or she yells, this negative attention could actually reinforce the child's behavior. Parents can be primed to use their attention to encourage of more desirable behaviors. Charts and graphs can help to guide the implementation of behavioral methods to support change on the part of children and/or parents.

APPLICATIONS WITH SPECIFIC CHILDHOOD DISORDERS

Although common elements might suggest that CBT is uniform in its application, this is not the case. Treatments are designed for specific disorders, and strategies are used differentially to be consistent with the nature of the disorder and the child's unique needs. In this section we describe some disorder-specific programs and related research findings.

Anxiety Disorders

The experience of fear and anxiety is part of normal development for most children. As children develop, the content of their anxieties and fears tends to reflect changes in their perceptions of reality. Children's fears tend to begin with content that is more global, imaginary, uncontrollable, and powerful (e.g., the "boogie man" that lurks in the dark), and over time fears become more specific, differentiated, and realistic (e.g., worries about peer acceptance and school performance; Bauer, 1976). Anxiety becomes a disorder when the experience is exaggerated beyond what would be expected in a given situation, or when it interferes with the youth's functioning. Treatment may be indicated when the severity and duration of the fears impinge on a child's accomplishment of key developmental tasks, such as making friends, attending school, and tolerating age-appropriate separation. Without treatment, it appears that anxiety disorders in childhood and adolescence have a chronic course and are associated with comorbid psychopathology in adulthood (anxiety, depression, substance use; Aschenbrand, Kendall, Webb, Safford, & Flannery-Schroeder, 2003; Woodward & Fergusson, 2001).

CBT for anxiety disorders in youth integrates the demonstrated efficiencies of the behavioral approach (e.g., exposure, relaxation training, role plays) with an added emphasis on the cognitive information-processing factors associated with each individual's anxiety. The goals of treatment are to teach children to recognize the signs of anxious arousal, and to let these signs serve as

cues for the use of anxiety management techniques. A 16-session child-focused manualized treatment program for anxious youth called the Coping Cat Program (or C.A.T. Project for teens; Kendall, 1992) has been translated into many languages. The program is broken into two treatment segments: skills training (the first eight sessions) and skills practice (the last eight sessions). The skills training sessions focus on building four basic skills areas: awareness of bodily reactions to feelings and physical symptoms specific to anxiety; recognition and evaluation of anxious "self-talk"; problem-solving skills (see Table 12.1), including modifying anxious self-talk and developing plans for coping; and self-evaluation and reward. During the skills practice segment of

TABLE 12.1. Problem-Solving Steps for Adolescents and Parents

-
- I. Define the problem.
 - A. You each tell the others what they are doing that bothers you and why.
 1. Be brief.
 2. Be positive, not accusing.
 - B. You each repeat the others' statements of the problem to check out your understanding of what they said.
 - II. Generate alternative solutions.
 - A. You take turns listing possible solutions.
 - B. You follow three rules for listing solutions:
 1. List as many ideas as possible.
 2. Don't evaluate the ideas.
 3. Be creative; suggest crazy ideas.
 - C. You won't have to do it just because you say it.
 - III. Evaluate/decide upon the best idea.
 - A. You take turns evaluating each idea.
 1. Would this idea solve the problem for you?
 2. Would this idea solve the problem for others?
 3. Rate the idea "plus" or "minus" on a worksheet.
 - B. You select the best idea.
 1. Look for ideas rated "plus" by all.
 - a. Select one such idea.
 - b. Combine several such ideas.
 2. If none was rated "plus" by all, see where you came closest to agreement and negotiate a compromise. If two parents are participating, look for ideas rated "plus" by one parent and the teenager.
 - IV. Plan to implement the selected solution.
 - A. You decide who will do what, when, where, and how.
 - B. Plan reminders for task completion.
 - C. Plan consequences for compliance or noncompliance.
-

treatment, youth practice the learned skills in actual anxiety-provoking situations.

This CBT program presents the main principles of anxiety management using the FEAR acronym (see Table 12.2): (1) recognizing bodily symptoms of anxiety (i.e., Feeling frightened?), (2) identifying anxious cognitions (i.e., Expecting bad things to happen), (3) developing a repertoire of coping strategies (i.e., Actions and attitudes that can help), and (4) Results and rewards (i.e., contingency management). The child learns the FEAR plan during the skills training portion of treatment and then applies these steps during the skills practice portion (see Table 12.3).

Variations on Kendall's child-focused CBT include group (Flannery-Schroeder & Kendall, 2000; Mendlowitz et al., 1999), family (Howard, Chu, Krain, Marrs-Garcia, & Kendall, 2000), and group school-based treatment (Masia-Warner, Nangle, & Hansen, 2006). Albano and Barlow (1996) also developed CBT groups for socially anxious teenagers (cf. Heimberg et al., 1990). The program components include cognitive restructuring to identify and change cognitive distortions that perpetuate anxiety, social skills training to address areas of deficit, and problem-solving training. Silverman, Ginsburg, and Kurtines (1995) have developed a CBT approach for children with phobias and other anxiety disorders that is similar to the approach presented by Kendall et al. (1992) but that includes separate and conjoint child and parent sessions. Recently, investigators have augmented child-focused with parent and family involvement (Barrett, Dadds, & Rapee, 1996; Cobham, Dadds, & Spence, 1998; Wood, Piacentini, Southam-Gerow, Chu, & Sigman, 2006), but the benefits of parental involvement relative to child-focused CBT are mixed. There is a need for future research in this area.

The literature supports the efficacy of CBT for anxiety disorders in youth. Reviewers (e.g., Kazdin & Weisz, 1998; Ollendick & King, 1998) have indicated that, using the criteria for empirically supported treatment (Chambless & Hollon, 1998), CBT can be considered to have demonstrated efficacy. Liter-

TABLE 12.2. FEAR Plan for Use with Anxious Youth

-
1. Feeling nervous?
Are you feeling nervous? How can you tell?
 2. Expecting bad things to happen?
Tune into your self-talk. What is it that is worrying you in this situation?
 3. Attitudes and actions can help.
What are some other ways to think about this situation? What are some actions I can take to make this situation better?
 4. Results and rewards.
How did I do? Was I able to help myself take action and feel better?
Way to go!
-

Note. From Kendall (1992). Copyright 1992 by Workbook Publishing. Reprinted by permission.

TABLE 12.3. Sample FEAR Plan

Situation: Ordering for myself at a restaurant

1. *Feeling frightened?*
 - a. My hands are sweating and my stomach hurts.
 2. *Expecting bad things to happen?*
 - a. What if I forget what to say? What if the waiter laughs at me?
 3. *Attitudes and actions that can help.*
 - a. I can do this. The waiter looks like a nice person and he probably won't laugh at me. Besides, what's the worst thing that can happen?
 4. *Results and rewards.*
 - a. I did it! I ordered my own pizza and, wow, was it delicious! My dad will be so proud of me.
-

ature involving potential mechanisms associated with change is also receiving much needed attention. Kendall and Treadwell (2007) found that children's anxious, but not positive or depressed, self-statements predicted anxiety in children and mediated treatment gains. Research programs are utilizing a broader array of assessment tools that allow for the examination of self-talk, self-perceptions, coping abilities, and level of treatment satisfaction of children experiencing anxiety disorders.

Obsessive-Compulsive Disorder

There is an emerging literature on the efficacy of both CBT and pharmacological interventions for the treatment of obsessive-compulsive disorder (OCD) in youth. Findings from studies comparing CBT to pharmacological interventions in children (de Haan, Hoogduin, Buitelaar, & Keijers, 1998; Pediatric OCD Treatment Study Team, 2004), with regard to efficacy, safety, and durability of response have led to the consensus recommendation that CBT be considered the initial treatment choice for OCD across the age span (Albano, March, & Piacentini, 1999; March, Frances, Carpenter, & Kahn, 1997).

An efficacious cognitive-behavioral treatment for youth with OCD was developed by March and colleagues (March, 1995; March & Mulle, 1998; March, Mulle, & Herbel, 1994). This program uses traditional behavioral approaches of exposure, response prevention, and extinction, coupled with anxiety management components that include relaxation and cognitive restructuring. The behavioral conceptualization of OCD views obsessions as intrusive, unwanted thoughts, images, or urges that trigger a significant and rapid increase in anxiety, and views compulsions as overt behavior or cognition designed to reduce these negative feelings (Albano et al., 1999). Based on learning theory, compulsions are negatively reinforced over time by their ability to reduce the obsession-triggered distress. The more successfully that compulsive behaviors reduce distress, the more powerful they become. Each

time a child carries out a compulsion, the reduction in distress strengthens the compulsive behavior.

March and colleagues' CBT program for youth with OCD includes a variety of treatment strategies, such as psychoeducation, creation of a symptom hierarchy, exposure and response prevention (ERP), addressing obsessions, and contingency management (March & Mulle, 1998). During the psychoeducation phase, the therapist educates the patient and the family about OCD, within a cognitive-behavioral conceptualization. The creation of the symptom hierarchy provides a template to design individual exposure tasks and determine the implementation sequence. During ERP the child remains in contact with feared stimuli and resists related rituals or other anxiety-reducing actions. Therapists model adaptive coping strategies to reduce anticipatory anxiety and enhance coping self-talk before and during ERP. Family factors are also important in the treatment of OCD in youth. Recent studies corroborate observations from substantial clinical experience and attest to the impact of family context on OCD expression and the impact of the child's symptoms on family functioning (Piacentini & Langely, 2004; Waters & Barrett, 2000). Youth who present for treatment of OCD likely will have a parent or other immediate family member who is similarly affected. Family functioning may also be an important predictor of both initial response to treatment and long-term outcome. High emotional reactivity and negative family perceptions about OCD have been associated with worse treatment response in adults, and further research is needed to determine whether this applies to youth (Livingston-Van Noppen, Rasmussen, Eisen, & McCartney, 1990).

Aggressive Behavior

Aggressive behavior is a pattern of severe, chronic, and frequent interpersonal interactions (i.e., verbal and physical behavior) that are destructive to others (Bandura, 1971). This pattern of behavior in children and adolescents is the leading cause of referral for mental health services in the United States (Achenbach & Howell, 1993; Lochman et al., 2006). Children with chronic, severe, and frequent aggressive behavior are frequently diagnosed with oppositional defiant disorder and conduct disorder.

The social-cognitive model proposes that the maladaptive behavior of an aggressive child is due to the child's perception and appraisal of a distressing event (Crick & Dodge, 1994). Specifically, these youth experience a misattribution of intentionality: Aggressive youth see negative outcomes from ambiguous situations that involve others as having been intentional and provocative, and thereby justifying retaliation (Dodge, 1985). The three components of this model suggest that perception and appraisal, arousal, and social problem solving contribute to the child's aggressive response (Lochman et al., 2006). CBT for aggressive children aims to address these distorted perceptions, misattributions of intentionality, overreliance on nonverbal solutions, and underreliance on verbal solutions (Lochman et al., 2006). A review of the literature

suggests that aggressive children are responsive to CBT interventions, with success in both school- and clinic-based interventions for children who exhibit aggressive behavior.

School-based treatments have a long tradition, which includes the "turtle technique" (Robin & Schneider, 1974; Robin, Schneider, & Dolnick, 1976). The Lochman group program (Lochman et al., 2006; Lochman, Burch, Curry, & Lampron, 1984; Lochman & Curry, 1986; Lochman, Lampron, Gemmer, Harris, & Wyckoff, 1989) includes training and practice in the use of problem-solving steps, training in the recognition of physiological cues of arousal, and practice in the use of self-calming talk during provocation situations. The addition of behavioral goal setting has further improved treatment impact. In this circumstance, the goal setting involved having the child state a goal in group, while the classroom teacher monitored progress on the goal on a daily basis, with contingent reinforcement for successful goal attainment. In a 3-year follow-up of boys treated in the Anger Coping Program, Lochman (1992) reported lower rates of drug and alcohol involvement and higher levels of social problem-solving skills and self-esteem relative to untreated controls. The groups were equivalent, however, in rates of reported delinquent behavior, which led Lochman to suggest the need for interventions of greater intensity that also permit more parental involvement.

The Coping Power Program is an adaptation of Lochman's Anger Coping Program (see Lochman, Wells, & Murray, 2007). This school-based treatment for fourth through sixth graders utilizes a 34-session group treatment for children, along with a 16-session parent component. The program focuses on social-cognitive difficulties in aggressive youth (Lochman et al., 2006). In addition to the components mentioned earlier, this treatment includes a parent component to improve on the dyadic relationship and to help teach effective parenting (Lochman et al., 2006). Other important aspects of treatment include self-control exercises and social perspective-taking skills. Self-control exercises put the child in an anger-provoking situation under controlled and supportive circumstances, whereas social perspective-taking skills allow the child to engage in both cognitive and affective perspective taking in others (Lochman et al., 2006). Evidence supports the program's efficacy on child social information-processing and parenting practices, because youth who received the intervention showed significant reductions in self-reported delinquency, parent-reported substance use, and teacher-reported behavioral problems at 1-year follow-up, particularly in youth who received the parent and child components of the treatment (Lochman & Wells, 2004).

Cognitive-behavioral interventions have also been successful with more severely impaired samples, as illustrated by the work of Kazdin and colleagues (Kazdin, 2005; Kazdin, Bass, Siegel, & Thomas, 1989; Kazdin, Esveldt-Dawson, French, & Unis, 1987a, 1987b; Kazdin, Siegel, & Bass, 1992) with 7- to 13-year-old children hospitalized for severe aggressive and destructive behavior. The cognitive-behavioral treatment emphasized problem-solving training, and treatment effects were improved by the addition of more *in vivo*

opportunities for skills practice and by behavioral child management training for the parents. The combination of problem-solving training and parent management training was most successful at moving children from clinical to normative levels of functioning, as assessed by rating scale measures. Kazdin and Crowley (1997) observed that children with greater academic dysfunction and more symptoms at study outset across a range of different diagnostic categories appeared to benefit less from CBT. In addition, parent, family, and contextual factors, such as economic disadvantage, parent history of antisocial behavior, and poor child rearing practices, were associated with poorer outcomes. Kazdin and Whitley (2006) investigated the effect of comorbidity and case complexity on treatment outcome in youth referred for disruptive behavior. The authors found that neither comorbidity nor case complexity produced any significant differences on treatment outcome. This result suggests that this treatment can remediate complex and comorbid presentations of disruptive behavior.

A CBT intervention developed to prevent aggressive behavior in high-risk children has also been found to be effective at periods up to a 2-year follow-up (Families and Schools Together [FAST]; McDonald, 1993; McDonald et al., 2006). This school-based collaborative program for families, youth, and schools is an effort to reach elementary school children who have been identified by teachers as having behavioral problems.

Attention-Deficit/Hyperactivity Disorder

The evolution in thinking about the usefulness of CBT in the treatment of attention-deficit/hyperactivity disorder (ADHD) provides an interesting example in the cycle of science (Braswell, 2007; Hinshaw, 2006). Often a new approach is enthusiastically greeted, widely applied, then found to be less useful than was originally believed. Children who are diagnosed with ADHD have levels of inattention, impulsivity, and, in some cases, hyperactivity that exceed normative standards for their age and cognitive level. Because cognitive deficiencies are associated with ADHD-type behavior (August, 1987; see also Kendall & McDonald, 1993), there seems to be a match between the goals of certain types of CBT, such as problem-solving approaches, and the needs of children with ADHD. In their meta-analytic review of the cognitive-behavioral outcome literature with impulsive children, Baer and Nietzel (1991) concluded that CBT was associated with improvements of approximately one-third to three-quarters of a standard deviation relative to untreated controls, but the targeted groups had scores that fell close to comparison group means, both before and after treatment. Thus, the severity of the behavioral issues of these children must be questioned, and the efficacy of CBT with impulsiveness may not generalize to youth with ADHD.

Consistent with a concern about efficacy, researchers who conducted interventions with children who met full criteria for ADHD (or its diagnostic equivalent at the time of each study) generally did not achieve success on

either social or academic outcome measures (see reviews by Abikoff, 1985, 1991; Kendall & Braswell, 1993). In addition, when CBT was combined with psychostimulant medication treatment, there was little evidence of effects beyond those achieved with medication alone (Abikoff et al., 1988; Brown, Borden, Wynne, Schleser, & Clingerman, 1986; Brown, Wynne, & Medenis, 1985). Braswell et al. (1997) evaluated the effects of a 2-year school-based child group training program that targeted children selected by parents and teachers on the basis of their disruptive behavior. Two-thirds of this sample met DSM-III-R criteria for ADHD. Treated children participated in 28 training groups over a 2-year period, and their parents and teachers participated in information and behavior management groups. The results of this multicomponent intervention were compared to those of a control condition in which parents and teachers received information, but the children received no direct service. Both conditions displayed improvement at posttest, but subsequent follow-up data indicated no significant difference in the functioning of the two groups. Thus, despite initial enthusiasm for the use of these methods, the results of other teams and our own compel the conclusion that problem-solving training efforts should not be considered a treatment for the primary symptoms of ADHD. Children with ADHD appear to need interventions at the point of performance rather than interventions that train skills in one setting and provide few or no prompts and reinforcements for skills use in the target environment (Goldstein & Goldstein, 1998).

Although cognitive problem-solving approaches may not be the most appropriate interventions for the primary symptoms of ADHD, these approaches may be suitable for adjunctive issues, such as parent-child conflict, and for coexisting concerns, such as aggressive behavior, anxiety, and depression. In a 14-month randomized trial, the Multimodal Treatment Study of Children with Attention-Deficit/Hyperactivity Disorder (MTA Cooperative Group, 1999a), carefully titrated medications appeared to have the greatest positive impact on the core symptoms of ADHD, while combined medication and intensive behavioral intervention demonstrated additional positive effect on coexisting issues, including oppositional and defiant disorder behavior, internalizing symptoms, and parent-child relationship concerns. Behavioral treatment without medication only outperformed community care for children who manifested ADHD and symptoms of anxiety (MTA Cooperative Group, 1999b). This study suggests that medication may be superior to behavioral interventions for ADHD.

This brief review leads to a question about the role of CBT in the treatment of ADHD. Hinshaw (2006) argues that although cognitive interventions do not provide meaningful change in clinical cases of ADHD, medication treatments are short-term and not curative. The combination of psychosocial and drug therapies has sometimes showed greater change than medication alone (Hinshaw, Klein, & Abikoff, 2002; Swanson, Kraemer, & Hinshaw, 2001). Thus, there may be a place for CBT interventions within the multimodal treatment of ADHD (Hinshaw, 2006). Hinshaw suggests that combin-

ing cognitive treatments for verbal mediation, along with contingencies and behavioral rehearsal, is an avenue for future research.

Depression

CBT has been labeled "possibly efficacious" for depressed children and "probably efficacious for depressed adolescents" (Kazdin & Weisz, 1998). More controlled outcome studies have been published, yet few studies have examined younger children and the research is somewhat diverse in terms of the CBT approaches that have been examined.

Lewinsohn and colleagues (Clarke et al., 2001; Lewinsohn, Clarke, Hops, & Andrews, 1990; Lewinsohn, Clarke, & Rohde, 1994; Lewinsohn, Clarke, Rohde, Hops, & Seeley, 1996) have conducted two randomized clinical trials of their cognitive-behavioral treatment with severely depressed adolescents, which have yielded evidence for change. The Adolescent Coping with Depression (CWD-A) group program trains skills that are emphasized in cognitive formulations of depression, such as learning to recognize depressogenic patterns of thinking and substituting more constructive cognitions, along with skills associated with more behavioral formulations, such as increasing client behaviors that elicit positive reinforcement and avoid negative reinforcement from the environment. This change in reinforcement patterns often requires the training of social and other coping skills, through structured group sessions that emphasize role playing, homework assignment, and rewards and contracts. A companion group education program for the parents of the depressed teens has also been developed (Lewinsohn, Rohde, Hops, & Clarke, 1991). Interestingly, adding parent group participation did not appear to yield outcomes significantly better than those achieved when only the adolescents participated in the program (Lewinsohn et al., 1990). Also, an attempt to clarify the most effective pattern of booster sessions following group completion did not yield results in favor of one pattern over another (Lewinsohn et al., 1994). Clarke, Rohde, Lewinsohn, Hops, and Seeley (1999) also demonstrated the effectiveness of CBT group treatment over a waiting-list control, with improvement rates not significantly different for the adolescent-only or adolescent plus parent group condition.

Brent and colleagues (Birmaher et al., 2000; Brent et al., 1997, 1998; Brent, Kolko, Birmaher, Baugher, & Bridge, 1999) compared the effectiveness of CBT with systemic behavioral family therapy and nondirective supportive therapy with depressed adolescents. CBT resulted in more rapid and complete relief of depressive symptoms than the other two treatments at the end of the 12-week acute treatment phase (Brent et al., 1997), and had a particular treatment advantage with patients' who were comorbid for anxiety (Brent et al., 1998). CBT's relative efficacy decreased in cases where maternal depression was present, however. Despite these superior results in the acute phase, patients in all conditions were equally likely to receive or be recommended for additional treatment during the 24-month follow-up period (Brent et al.,

1999). The need for follow-up treatment was best predicted by the continuing severity of depressive symptoms at the end of the acute phase, and the presence of disruptive behavior and family difficulties. Brent et al. speculated that CBT may be superior for initial symptom reduction, but approaches that provide some form of family involvement might be of greater value in addressing residual behavioral disruption and/or ongoing family conflicts.

The efficacy of CBT was evaluated in a large study of depressed youth, the Treatment for Adolescents with Depression Study (TADS; March, 2004), which compared medication (fluoxetine), CBT, medication plus CBT, and placebo in 351 adolescents with moderate to severe major depressive disorder. The TADS CBT program involved 12 weeks of treatment that included psychoeducation, goal setting, mood monitoring, increased activities, social problem solving, and cognitive restructuring. There were also modules that focused on social skills deficits and family sessions related to psychoeducation and parent-adolescent relationship concerns. The study found that although fluoxetine alone was effective, the combination of CBT and fluoxetine was the most effective for symptom reduction. Although the CBT in TADS was not itself as effective as in prior studies at posttreatment, a positive response to CBT was found at follow-up (TADS Team, 2007). At 18 months after treatment, response rates to CBT alone were equivalent to those of fluoxetine alone (both were effective), and at 3-year follow-up the response to CBT alone was equivalent to the combination of CBT and fluoxetine. It is also worth noting that the TDS study team reported that adolescents who received CBT, whether alone or in combination with fluoxetine, had lower rates of suicidal ideation and attempts in the 2 years following treatment.

Other treatment programs for depression have been developed, though more empirical data on these programs is needed. ACTION is a manual-based treatment program that is guided by individual case conceptualization (Stark et al., 2006), in which children are taught coping, problem solving, and cognitive restructuring skills. ACTION includes both parent training and teacher consultation components that encourage parents and teachers to modify their environments to support the application of the child's new skills. Research is still in progress, but preliminary results suggest that this intervention is effective (Stark et al., 2006).

Prevention or reduction of risk for relapse or recurrence of depression following successful treatment is also an important concern when working with children/adolescents. Kroll, Harrington, Jayson, Fraser, and Gowers (1996) conducted a pilot study of maintenance CBT for adolescents who had remitted from major depressive disorder. Adolescents in the maintenance CBT condition exhibited a lower cumulative risk of relapse over a 6-month period relative to controls (0.2 vs. 0.5). In contrast, Clarke et al. (1999) found that booster sessions did not reduce rates of recurrence during a 24-month follow-up period, although rates of recurrence were low for all conditions. Booster sessions did, however, appear to accelerate recovery for those adolescents who had continued symptoms of depression at the end of the acute treatment phase.

In a fascinating approach to school-based prevention, Clarke et al. (1995) identified ninth graders considered to be at risk but not yet experiencing an episode of depression, based on self-report measures and follow-up structured diagnostic interview. These students then participated in fifteen 45-minute afterschool groups, in which students were taught cognitive techniques for identifying and challenging unhelpful thinking that might increase feelings of depression. Using survival analysis, the investigators then examined how many cases of major depressive disorder or dysthymia emerged in the treated group versus a usual care control group of teens. At 12-month follow-up, rates of depression were 14.5% for the treated group compared to 25.7% for the control group.

As these studies indicate, CBT for depressed children and adolescents is a promising treatment. There is, however, a striking need for the treatment packages and treatment components within this domain to be carefully evaluated by research teams that are independent from the creators of these approaches.

Other Disorders

In addition to the research advancements in the previously discussed treatment areas, additional efficacy studies examining CBT have been published. For example, researchers have reported on outcomes associated with CBT for trauma and/or posttraumatic stress disorder, school refusal, adolescent suicidality, and eating disorders (for chapters on specific disorders, see Kendall, 2006).

SPECIAL ISSUES

Transportability/Dissemination

Two issues that face all of the empirically supported interventions are dissemination and implementation. There has been activity within the psychological community to advance the use of “empirically supported treatments” (ESTs), which are psychological interventions that have been evaluated scientifically (e.g., randomized controlled trials) and satisfy the Chambless and Hollon (1998) criteria (Kendall & Beidas, 2007). Examples of ESTs for children and adolescents can be found in (1) books and chapters (e.g., Hibbs & Jensen, 2005; Kazdin & Weisz, 2003; Kendall, 2006; Weisz, 2004; Chambless & Ollendick, 2001), (2) the results of reviews available on Web-based resources (Substance Abuse and Mental Health Services Administration [SAMHSA]-sponsored contract run by MANILA Consulting Group; available at www.nationalregistry.samhsa.gov), (3) lists generated by professional associations (e.g., Kettlewell, Morford, & Hoover, 2005), and (4) in journals (e.g., Herschell, McNeil, & McNeil, 2004; special issues of the *Journal of Consulting and Clinical Psychology* (Kendall & Chambless, 1998), and the *Journal of Clinical Child Psychology* (Lonigan & Ebert, 1998)). Many of the listed ESTs

for youth include CBT approaches. Illustrative examples of ESTs for various mental health disorders include Multisystemic Family Therapy (Henggeler & Borduin, 1990), Parent–Child Interaction Therapy (Brinkmeyer & Eyberg, 2003), Coping Power (Lochman et al., 2006), and Parent Management Training (Kazdin, 2005) for externalizing behavior in youth. For depressed youth, ESTs include the Taking Action Program (Stark et al., 2006). For anxious youth, ESTs include the Coping Cat Program (Kendall et al., 1997) and CBT for OCD (Pediatric OCD Team, 2004). Summary chapters and articles are also available that consider ESTs for the full range of childhood disorders (e.g., Ollendick, King, & Chorpita et al., 2006; Herschell et al., 2004).

The bulk of the ESTs use treatment manuals to guide implementation and to help ensure treatment fidelity (i.e., treatment adherence). Treatment manuals have been critiqued as being too linear, as not applicable outside of a research setting, as cookbooks for therapy, and as reducing clinicians to technicians (Duncan & Miller, 2006; Lambert, 1998; Bohart, O'Hara, & Leitner, 1998; Westen, Novotny, & Thompson-Brenner, 2004). We suggest, however, that treatment manuals are not restrictive when done flexibly: *flexibility within fidelity* (Kendall & Beidas, 2007). To illustrate this point, the Coping Cat program (Kendall & Hedtke, 2006a), an EST for anxious youth, has been implemented flexibly but also with fidelity (Kendall & Chu, 2000). One component of the Coping Cat includes exposure tasks that challenge youth to face anxiety-provoking stimuli. All youth who go through the Coping Cat program complete exposure tasks, but these tasks are individualized. Treatment for social rejection in the classroom or for general worry about safety concerns includes and requires exposure tasks that are specific to the presenting problem (Kendall et al., 2005). For example, an exposure task for social anxiety might involve the child doing a survey or asking other children about classroom behavior. An exposure task for general distress about safety concerns might focus on an open discussion about health issues and a call to an expert to ask questions.

Computers are increasingly important in both dissemination and implementation. With regard to CBT for anxiety in youth, there is a dissemination DVD, entitled *CBT4CBT* (Computer-Based Training to be a Cognitive-Behavioral Therapist). *CBT4CBT* (Kendall & Khanna, 2008a) is organized in modules that are session-by-session guides for implementation. It includes video clips of therapy sessions, video examples of exposure tasks, “tips” from experienced therapists, and access to treatment materials. Users complete a “knowledge check” after each module before proceeding.

Also with regard to CBT for anxiety in youth, computers now facilitate implementation. There is a computer-assisted program called Camp Cope-A-Lot (Kendall & Khanna, 2008b). The program provides a 12-session interactive version of the empirically supported Coping Cat treatment for anxious youth. Along with other campers at Camp Cope-A-Lot, the user goes to an amusement park, puts on a talent show, meets someone new, speaks in public,

and experiences other adventures that build confidence and teach ways to manage anxiety.

As discussed by Kazdin and Kendall (1998), demonstrating that CBT is efficacious is a first step. Dissemination and implementation comprise the next step in ensuring that CBT is transported to the community, as evidence-based practice is "the integration of the best available research with clinical expertise" (American Psychological Association, 2005, p. 5). It is unlikely however, that CBT will yield equivalent outcomes in community-based clinics, where features of the setting, therapists, and clients may be quite different. Recognition of this issue highlights the need for effectiveness treatment outcome research and experimental trials with clients whose severity levels and cultural backgrounds similar to those seen in community-based settings.

Comorbidity

Many, if not most, CBT treatments were originally developed to treat a specific disorder or set of disorders. In contrast, many disorders of childhood are highly comorbid with other disorders (Flannery-Schroeder, Suveg, Safford, Kendall, & Webb, 2004; Nock, Kazdin, Hiripi, & Kessler, 2007; Seligman & Ollendick, 1998). In the past, and with some exceptions (notably, treatments that are designed to treat multiple, similar disorders, such as the Coping Cat; Kendall & Hedke, 2006a), the approach to address comorbidity has been to make slight adaptations to the treatment for the primary disorder to accommodate these additional diagnoses. More recently, modular approaches have been developed to address some of these issues and to disseminate ESTs (Chorpita, 2007; Chorpita, Daleiden, & Weiz, 2005). The "modular approach" defines individualized ESTs for specific client problems and promotes flexible implementation of the core principles of CBT. A number of modules are considered core to the treatment, but these modules can be both selected and presented in varying sequences for each child. This approach allows for more *flexibility* and takes into account contextual factors of the child and the child's environment (e.g., family, school; Chorpita, 2007). At the same time, *structure* is still present, because the procedures are explicitly outlined within the manual and can be implemented with adherence (Chorpita, 2007).

There are a number of differences between modularized treatment (i.e., Chorpita, 2007) and standard manualized treatments (i.e., Kendall & Hedtke, 2006a). The frequency, parental involvement, duration of sessions, pace, setting, and skills taught are child-centered, meaning that they are more variable than in a standardized protocol (Chorpita, 2007). For example, a child who presents with a comorbid disruptive disorder, in addition to primary separation anxiety disorder, only needs specific modules that apply to his or her troubles, such as learning about anxiety, *in vivo* exposure, cognitive restructuring, and working with the parents on active ignoring, rewards, and time-out (Chorpita, 2007). Learning about social skills may not be necessary for

this particular child's problem. However, another child with social phobia may need that social skills module and not the extra modules for disruptive behaviors. Modularized treatment allows for a variable and child-centered approach that individualizes the protocol for each child.

Cultural Considerations

Research on the efficacy of cognitive-behavioral treatments for youth has been conducted primarily with European American clients. To date, there is no uniform methodology or framework for adapting and modifying treatment interventions for ethnic/minority groups, or for widespread implementation of such adaptations (Hwang, Wood, & Lin, 2006). Culture can affect symptom expression, perception and etiology of the disorder, therapeutic alliance, and treatment compliance. It can also influence why and when a family seeks treatment, as well as how the family is organized, which in turn influences who takes part in the treatment.

Research has demonstrated many similarities in the expression of different disorders among children, but many cultural differences also exist, particularly with respect to how children report symptoms, respond to treatment, and even respond to the therapist (Ginsburg & Silverman, 1996). Sensitivity to these differences is critical to guide assessment and treatment strategies, and to optimize work with children and families from diverse backgrounds. The cultural sensitivity of cognitive-behavioral psychological interventions can be enhanced by the assessment of the client's worldview using culture-specific assessment instruments, including culture-specific rituals, and profiling contextual factors. Research is slowly emerging on culturally sensitive adaptations of ESTs.

CONCLUSIONS AND FUTURE DIRECTIONS

The field of child intervention has come a long way since the days when all we could offer children was well-meaning therapists with good intentions! Specific forms of cognitive-behavioral treatment can be now recommended with confidence as efficacious treatments for aggressive 7- to 13-year-olds, and anxious and/or depressed children and adolescents. Other reviews of the field have deemed several of these approaches as probably efficacious (Brestan & Eyberg, 1998; Kaslow & Thompson, 1998; Ollendick & King, 1998). Research questions and pragmatic concerns remain, however. The demonstration of the efficacy of a particular approach demands ever greater specificity, the refinement of research methods, and the integration of knowledge from related fields. Future treatment outcome research and practice will need to integrate existing and emerging knowledge from the domains of child development, education, psychopathology, and cross-cultural psychology.

REFERENCES

- Abikoff, H. (1985). Efficacy of cognitive training interventions in hyperactive children: A critical review. *Clinical Psychology Review*, 5, 479–512.
- Abikoff, H. (1991). Cognitive training in ADHD children: Less to it than meets the eye. *Journal of Learning Disabilities*, 24, 205–209.
- Abikoff, H., Ganales, D., Reiter, G., Blum, C., Foley, C., & Klein, R. G. (1988). Cognitive training in academically deficient ADHD boys receiving stimulant medication. *Journal of Abnormal Child Psychology*, 16, 411–432.
- Achenbach, T. M., & Howell, C. T. (1993). Are American children's problems getting worse?: A 13-year comparison. *Journal of the American Academy of Child and Adolescent Psychiatry*, 32, 1145–1154.
- Albano, A. M., & Barlow, D. H. (1996). Breaking the vicious cycle: Cognitive-behavioral group treatment for socially anxious youth. In E. D. Hibbs & P. S. Jensen (Eds.), *Psychosocial treatments for child and adolescent disorders: Empirically based strategies for clinical practice* (pp. 43–62). Washington, DC: American Psychological Association.
- Albano, A. M., March, J. S., & Piacentini, J. C. (1999). Obsessive–compulsive disorder. In R. T. Ammerman, M. Hersen, & C. G. Last (Eds.), *Handbook of prescriptive treatments for children and adolescents* (2nd ed., pp. 193–213). Needham Heights, MA: Allyn & Bacon.
- American Psychological Association. (2005, August). *American Psychological Association policy statement on evidence-based practice in psychology*. Retrieved March 6th, 2006 from www.apa.org/practice/ebpreport.pdf.
- Aschenbrand, S. G., Kendall, P. C., Webb, A., Safford, S. M., & Flannery-Schroeder, E. C. (2003). Is childhood separation anxiety disorder a predictor of adult panic disorder and agoraphobia?: A seven-year longitudinal study. *Journal of the American Academy of Child and Adolescent Psychiatry*, 42, 1478–1485.
- August, G. (1987). Production deficiencies in free recall: A comparison of hyperactivity learning-disabled and normal children. *Journal of Abnormal Child Psychology*, 15, 429–440.
- Baer, R. A., & Nietzel, M. T. (1991). Cognitive and behavioral treatment of impulsivity in children: A meta-analytic review of the outcome literature. *Journal of Clinical Child Psychology*, 20, 400–412.
- Bandura, A. (1969). *Principles of behavior modification*. New York: Holt, Rinehart & Winston.
- Bandura, A. (1971). Psychotherapy based upon modeling procedures. In A. Bergin & S. Garfield (Eds.), *Handbook of psychotherapy and behavior change*. New York: Wiley.
- Bandura, A. (1986). Fearful expectations and avoidant actions as co-effects of perceived self-inefficacy. *American Psychologist*, 41, 1389–1391.
- Barmish, A. J., & Kendall, P. C. (2005). Should parents be co-clients in cognitive-behavioral therapy for anxious youth? *Journal of Clinical Child and Adolescent Psychology*, 34, 569–581.
- Barrett, P. M., Dadds, M. M., & Rapee, R. M. (1996). Family treatment of childhood anxiety: A controlled trial. *Journal of Consulting and Clinical Psychology*, 64, 333–342.
- Barrios, B. A., & O'Dell, S. L. (1989). Fears and anxieties. In E. J. Mash & R. A. Bar-

- kley (Eds.), *Treatment of childhood disorders* (pp. 167–221). New York: Guilford Press.
- Bauer, D. H. (1976). An exploratory study of developmental changes in children's fears. *Journal of Child Psychology and Psychiatry*, 17, 69–74.
- Beck, A. T., Rush, A. J., Shaw, B. F., & Emery, G. (1979). *Cognitive therapy of depression*. New York: Guilford Press.
- Birmaher, B., Brent, D. A., Kolko, D., Baugher, M., Bridge, J., Holder, D., et al. (2000). Clinical outcome after short-term psychotherapy for adolescents with major depressive disorder. *Archives of General Psychiatry*, 54, 877–885.
- Bohart, A., O'Hara, M., & Leitner, L. (1998). Empirically violated treatments: Disenfranchisement of humanistic and other psychotherapies. *Psychotherapy Research*, 8, 141–157.
- Braswell, L. (2007). Meeting the treatment needs of children with ADHD: Can cognitive strategies make a contribution? In R. W. Christner, J. L. Stewart, & A. Freeman (Eds.), *Handbook of cognitive behavior group therapy with children and adolescents: Specific settings and presenting problems* (pp. 317–322). New York: Routledge/Taylor & Francis.
- Braswell, L., August, G., Bloomquist, M. L., Realmuto, G. M., Skare, S., & Crosby, R. (1997). School-based secondary prevention for children with disruptive behavior: Initial outcomes. *Journal of Abnormal Child Psychology*, 25, 197–208.
- Brent, D. A., Holder, D., Kolko, D. A., Birmaher, B., Baugher, M., & Bridge, J. (1997). A clinical psychotherapy trial for adolescent depression comparing cognitive, family, and supportive treatments. *Archives of General Psychiatry*, 54, 877–885.
- Brent, D. A., Kolko, D. J., Birmaher, B., Baugher, M., & Bridge, J. (1999). A clinical trial for adolescent depression: Predictors of additional treatment in the acute and follow-up phases of the trial. *Journal of the American Academy of Child and Adolescent Psychiatry*, 38, 263–271.
- Brent, D. A., Kolko, D. J., Birmaher, B., Baugher, M., Bridge, J., Roth, C., et al. (1998). Predictors of treatment efficacy in a clinical trial of three psychosocial treatments for adolescent depression. *Journal of the American Academy of Child and Adolescent Psychiatry*, 37, 906–914.
- Brestan, E. V., & Eyberg, S. M. (1998). Effective psychosocial treatments of conduct disordered children and adolescents: 29 years, 82 studies, and 5,272 kids. *Journal of Clinical Child Psychology*, 27, 180–189.
- Brinkmeyer, M. Y., & Eyberg, S. M. (2003). Parent-child interaction therapy for oppositional children. In A. E. Kazdin & J. R. Weisz (Eds.), *Evidence-based psychotherapies for children and adolescents*. New York: Guilford Press.
- Brown, R. T., Borden, K. A., Wynne, M. E., Schleser, R., & Clingerman, S. R. (1986). Methylphenidate and cognitive therapy with ADD children: A methodological reconsideration. *Journal of Abnormal Child Psychology*, 13, 69–87.
- Brown, R. T., Wynne, M. E., & Medenis, R. (1985). Methylphenidate and cognitive therapy: A comparison of treatment approaches with hyperactive boys. *Journal of Abnormal Child Psychology*, 13, 69–87.
- Cautela, J. R., & Groden, J. (1978). *Relaxation: A comprehensive manual for adults, children, and children with special needs*. Champaign, IL: Research Press.
- Chambless, D., & Hollon, S. (1998). Defining empirically supported therapies. *Journal of Consulting and Clinical Psychology*, 66, 7–18.
- Chambless, D., & Ollendick, T. (2001). Empirically supported psychological interventions: Controversies and evidence. *Annual Review of Psychology*, 52, 685–716.

- Chorpita, B. F. (2007). *Modular cognitive-behavioral therapy for childhood anxiety disorders*. New York: Guilford Press.
- Chorpita, B. F., Daleiden, E., & Weisz, J. (2005). Modularity in the design and application of therapeutic interventions. *Applied and Preventive Psychology*, 11, 141–156.
- Clarke, G. N., Hawkins, W., Murphy, M., Sheeber, L. B., Lewinsohn, P. M., & Seeley, J. R. (1995). Targeted prevention of unipolar depressive disorder in an at-risk sample of high school adolescents: A randomized trial of group cognitive intervention. *Journal of Child and Adolescent Psychiatry*, 32, 312–321.
- Clarke, G. N., Rohde, P., Lewinsohn, P. M., Hops, H., & Seeley, J. R. (1999). Cognitive-behavioral treatment of adolescent depression: Efficacy of acute group treatment and booster sessions. *Journal of the American Academy of Child and Adolescent Psychiatry*, 38, 272–279.
- Clarke, G. N., Hornbrook, M., Lynch, F., Plen, M., Gale, J., Beardslee, W., et al. (2001). A randomized trial of a group cognitive intervention for preventing depression in adolescent offspring of depressed parents. *Archives of General Psychiatry*, 58, 1127–1134.
- Cobham, V. E., Dadds, M., & Spence, S. H. (1998). The role of parental anxiety in the treatment of childhood anxiety. *Journal of Consulting and Clinical Psychology*, 66, 893–905.
- Crick, N., & Dodge, K. (1994). A review and reformulation of social information-processing mechanisms in children's social adjustment. *Psychological Bulletin*, 115, 74–101.
- de Haan, E., Hoogduin, K. A., Buitelaar, J., & Keijers, G. (1998). Behavior therapy versus clomipramine for the treatment of obsessive-compulsive disorder. *Journal of the American Academy of Child and Adolescent Psychiatry*, 37, 1022–1029.
- Dodge, K. (1985). Attributional bias in aggressive children. In P. C. Kendall (Ed.), *Advances in cognitive-behavioral research and therapy* (Vol. 4). New York: Academic Press.
- Duncan, B., & Miller, S. (2006). Treatment manuals do not improve outcomes. In J. C. Norcross, L. E. Butler, & R. F. Levant (Eds.), *Evidence-based practices in mental health*. Washington, DC: American Psychological Association.
- D'Zurilla, T. J., & Goldfried, M. R. (1971). Problem-solving and behavior modification. *Journal of Abnormal Psychology*, 78, 107–126.
- D'Zurilla, T. J., & Nezu, A. M. (1999). *Problem-solving therapy: A social competence approach to clinical intervention*. (2nd ed.). New York: Springer.
- Ellis, A., & Harper, R. (1975). *A new guide to rational living*. New York: Wilshire.
- Feindler, E. L., & Ecton, R. B. (1986). *Adolescent anger control: Cognitive-behavioral techniques*. Elmsford, NY: Pergamon Press.
- Flannery-Schroeder, E., Suveg, C., Safford, S., Kendall, P. C., & Webb, A. (2004). Comorbid externalizing disorders and child anxiety treatment outcomes. *Behaviour Change*, 21, 14–25.
- Flannery-Schroeder, E. C., & Kendall, P. C. (2000). Group and individual cognitive-behavioral treatments for youth with anxiety disorders: A randomized controlled trial. *Cognitive Therapy and Research*, 24, 251–278.
- Ginsburg, G. S., & Silverman, W. K. (1996). Gender role orientation and fearfulness in children with anxiety disorders. *Journal of Anxiety Disorders*, 14, 57–67.
- Goldstein, S. (1995). *Understanding and managing children's classroom behavior*. New York: Wiley.

- Goldstein, S., & Goldstein, M. (1998). *Managing attention deficit hyperactivity disorder in children: A guide for practitioners*. New York: Wiley.
- Harter, S. (1982). A developmental perspective on some parameters of self-regulation in children. In P. Karoly & F. H. Kanfer (Eds.), *Self-management and behavior change: From theory to practice* (pp. 165–204). New York: Pergamon Press.
- Heimberg, R. G., Dodge, C. S., Hope, D. A., Kennedy, C. R., Zollo, L. J., & Becker, R. J. (1990). Cognitive behavioral group treatment for social phobia: Comparison with a credible placebo control. *Cognitive Therapy and Research*, 14, 1–23.
- Henggeler, S., & Borduin, C. (1990). *Family therapy and beyond: A multisystemic approach to treating the behavior problems of children and adolescents*. Pacific Grove, CA: Brooks/Cole.
- Herschell, A., McNeil, C., & McNeil, D. (2004). Clinical child psychology's progress in disseminating empirically supported treatments. *Clinical Psychology: Science and Practice*, 11, 267–288.
- Hibbs, E. D., & Jensen, P. S. (Eds.). (2005). *Psychosocial treatments for child and adolescent disorders: Empirically based strategies for clinical practice* (2nd ed.). Washington, DC: American Psychological Association.
- Hinshaw, S. P. (2006). Treatment for children and adolescents with attention-deficit/hyperactivity disorder. In P. Kendall (Ed.), *Child and adolescent therapy: Cognitive-behavioral procedures* (3rd ed., pp. 82–113). New York: Guilford Press.
- Hinshaw, S., Klein, R., & Abikoff, H. (2002). Nonpharmacologic treatments and their combination with medication. In P. E. Nathan & J. M. Gorman (Eds.), *A guide to treatments that work* (2nd ed., pp. 3–23). New York: Oxford University Press.
- Howard, B., Chu, B. C., Krain, A. L., Marrs-Garcia, M. A., & Kendall, P. C. (2000). *Cognitive-behavioral family therapy for anxious children: Therapist manual* (2nd ed.). Ardmore, PA: Workbook Publishing.
- Hwang, W. C., Wood, J. J., & Lin, K. H. (2006). Cognitive-behavioral therapy with Chinese Americans: Research, theory, and clinical practice. *Cognitive and Behavioral Practice*, 13, 293–303.
- Kahn, J. S., Kehle, T. J., Jenson, W. R., & Clark, E. (1990). Comparison of cognitive-behavioral, relaxation, and self-modeling interventions for depression among middle-school students. *School Psychology Review*, 19, 196–208.
- Kaslow, N. J., & Thompson, M. P. (1998). Applying the criteria for empirically supported treatments to studies of psychosocial interventions for child and adolescent depression. *Journal of Clinical Child Psychology*, 27, 146–155.
- Kazdin, A. (2005). *Parent management training: Treatment for oppositional, aggressive, and antisocial behavior in children and adolescents*. New York: Oxford University Press.
- Kazdin, A. E., Bass, D., Siegel, T., & Thomas, C. (1989). Cognitive-behavioral therapy and relationship therapy in the treatment of children referred for antisocial behavior. *Journal of Consulting and Clinical Psychology*, 57, 522–535.
- Kazdin, A. E., & Crowley, M. J. (1997). Moderators of treatment outcome in cognitively based treatment of antisocial children. *Cognitive Therapy and Research*, 21, 185–207.
- Kazdin, A. E., Esveldt-Dawson, K., French, N. H., & Unis, A. S. (1987a). Effects of parent management training and problem-solving skills training combined in

- the treatment of antisocial child behavior. *Journal of the American Academy of Child and Adolescent Psychiatry*, 26, 416–424.
- Kazdin, A. E., Esveltd-Dawson, K., French, N. H., & Unis, A. S. (1987b). Problem-solving skills training and relationship therapy in the treatment of antisocial child behavior. *Journal of Consulting and Clinical Psychology*, 55, 76–85.
- Kazdin, A. E., & Kendall, P. C. (1998). Current progress and future plans for developing effective treatments: Comments and perspectives. *Journal of Clinical Child Psychology*, 27, 217–226.
- Kazdin, A. E., Siegel, T. C., & Bass, D. (1992). Cognitive problem-solving skills training and parent management training in the treatment of antisocial behavior in children. *Journal of Consulting and Clinical Psychology*, 60, 733–747.
- Kazdin, A. E., & Weisz, J. R. (1998). Identifying and developing empirically supported child and adolescent treatments. *Journal of Consulting and Clinical Psychology*, 66, 19–36.
- Kazdin, A. E., & Weisz, J. R. (Eds.). (2003). *Evidence-based psychotherapies for children and adolescents*. New York: Guilford Press.
- Kazdin, A. E., & Whitley, M. (2006). Comorbidity, case complexity, and effects of evidence-based treatment for children referred for disruptive behavior. *Journal of Consulting and Clinical Psychology*, 74, 455–467.
- Kendall, P. C. (1992). *Coping Cat workbook*. Ardmore, PA: Workbook Publishing.
- Kendall, P. C. (1993). Cognitive-behavioral therapies with youth: Guiding theory, current status, and emerging developments. *Journal of Consulting and Clinical Psychology*, 61, 235–247.
- Kendall, P. C. (Ed.). (2000). *Child and adolescent therapy: Cognitive-behavioral procedures* (2nd ed.). New York: Guilford Press.
- Kendall, P. C. (Ed.). (2006). *Child and adolescent therapy: Cognitive-behavioral procedures* (3rd ed.). New York: Guilford Press.
- Kendall, P. C., & Beidas, R. S. (2007). Smoothing the trail for dissemination of evidence-based practices for youth: Flexibility within fidelity. *Professional Psychology: Research and Practice*, 38, 13–20.
- Kendall, P. C., & Braswell, L. (1993). *Cognitive behavioral therapy for impulsive children* (2nd ed.). New York: Guilford Press.
- Kendall, P. C., & Chambless, D. (Eds.). (1998). Empirically supported psychological therapies. *Journal of Consulting and Clinical Psychology*, 66 [Special issue].
- Kendall, P. C., Chansky, T. E., Kane, M., Kane, R., Kortlander, E., Ronan, K., et al. (1992). *Anxiety disorders in youth: Cognitive-behavioral interventions*. Needham Heights, MA: Allyn & Bacon.
- Kendall, P. C., Choudhury, M. S., Hudson, J. L., & Webb, A. (2002). *The C.A.T. Project Manual: Manual for the individual cognitive-behavioral treatment of adolescents with anxiety disorders*. Ardmore, PA: Workbook Publishing.
- Kendall, P. C., & Chu, B. C. (2000). Retrospective self-reports of therapist flexibility in a manual-based treatment for youths with anxiety disorders. *Journal of Clinical Child Psychology*, 29, 209–220.
- Kendall, P. C., Chu, B., Gifford, A., Hayes, C., & Nauta, M. (1998). Breathing life into a manual. *Cognitive and Behavioral Practice*, 5, 177–198.
- Kendall, P. C., Chu, B. C., Pimentel, S. S., & Choudhury, M. (2000). Treating anxiety disorders in youth. In P. C. Kendall (Ed.), *Child and adolescent therapy: Cognitive-behavioral procedures* (2nd ed., pp. 235–290). New York: Guilford Press.

- Kendall, P. C., Flannery-Schroeder, E., Panichelli-Mindel, S. M., Southam-Gerow, M., Henin, A., & Warman, M. J. (1997). Therapy for youth with anxiety disorders: A second randomized clinical trial. *Journal of Consulting and Clinical Psychology*, 65, 366–380.
- Kendall, P. C., & Hedtke, K. (2006a). *Cognitive-behavioral therapy for anxious children: Therapist manual* (3rd ed.). Ardmore, PA: Workbook Publishing.
- Kendall, P. C., & Hedtke, K. (2006b). *The Coping Cat Workbook* (2nd ed.). Ardmore, PA: Workbook Publishing.
- Kendall, P. C., & Khanna, M. (2008a). *CBT4CBT: Computer-based training to be a cognitive-behavioral therapist (for anxiety in youth)*. Ardmore, PA: Workbook Publishing.
- Kendall, P. C., & Khanna, M. (2008b). *Camp Cope-A-Lot: The Coping Cat CD*. Ardmore, PA: Workbook Publishing.
- Kendall, P. C., & McDonald, J. P. (1993). Cognition in the psychopathology of youth and implications for treatment. In K. S. Dobson & P. C. Kendall (Eds.), *Psychopathology and cognition* (pp. 387–427). San Diego: Academic Press.
- Kendall, P. C., Robin, J., Hedtke, K., Suveg, C., Flannery-Schroeder, E., & Gosch, E. (2005). Considering CBT with anxious youth?: Think exposures. *Cognitive and Behavioral Practice*, 12, 136–148.
- Kendall, P. C., Stark, K. D., & Adam, T. (1990). Cognitive deficit or cognitive distortion in childhood depression. *Journal of Abnormal Child Psychology*, 18, 255–270.
- Kendall, P. C., & Suveg, C. (2006). Treating anxiety disorders in youth. In P. Kendall (Ed.), *Child and adolescent therapy: Cognitive-behavioral procedures* (3rd ed., pp. 243–294). New York: Guilford Press.
- Kendall, P. C., & Suveg, C. (Eds.). (2007). *Clinical Psychology: Science and Practice*, 14 [Special issue].
- Kendall, P. C., & Treadwell, K. (2007). The role of self-statements as a mediator in treatment for youth with anxiety disorders. *Journal of Consulting and Clinical Psychology*, 75, 380–389.
- Kettlwell, P., Morford, M. E., & Hoover, H. (2005). *Evidence-based treatment: What is it and how can it help children* [Pennsylvania Child and Adolescent Service System Program]. Pennsylvania State University.
- Kleiner, L., Marshall, W., & Spevack, M. (1987). Training in problem-solving and exposure treatment for agoraphobics with panic attacks. *Journal of Anxiety Disorders*, 1, 219–238.
- Koeppen, A. S. (1974). Relaxation training for children. *Elementary School Guidance and Counseling*, 9, 14–26.
- Kroll, L., Harrington, R., Jayson, D., Fraser, J., & Gowers, S. (1996). Pilot study of continuation cognitive-behavioral therapy for major depression in adolescent psychiatric patient. *Journal of the American Academy of Child and Adolescent Psychiatry*, 35, 1156–1161.
- Lambert, M. (1998). Manual-based treatment and clinical practice: Hangman of life or promising development? *Clinical Psychology: Science and Practice*, 5, 391–395.
- Lewinsohn, P. M., Clarke, G. N., Hops, H., & Andrews, J. (1990). Cognitive-behavioral group treatment of depression in adolescents. *Behavior Therapy*, 21, 385–401.
- Lewinsohn, P. M., Clarke, G. N., & Rohde, P. (1994). Psychological approaches to

- the treatment of depression in adolescents. In W. M. Reynolds & H. F. Johnston (Eds.), *Handbook of depression in children and adolescents* (pp. 309–344). New York: Plenum Press.
- Lewinsohn, P. M., Clarke, G. N., Rohde, P., Hops, H., & Seeley, J. R. (1996). A course in coping: A cognitive-behavioral approach to the treatment of adolescent depression. In E. D. Hibbs & P. S. Jensen (Eds.), *Child and adolescent disorders: Empirically based strategies for clinical practice* (pp. 109–135). Washington, DC: American Psychological Association.
- Lewinsohn, P. M., Rohde, P., Hops, H., & Clarke, G. (1991). *Leader's manual for parent groups: Adolescent coping with depression*. Eugene, OR: Castalia Press.
- Livingston-Van Noppen, B., Rasmussen, S. I., Eisen, J., & McCartney, L. (1990). Family function and treatment in obsessive-compulsive disorder. In M. A. Jenike, L. Baer, & W. E. Minichiello (Eds.), *Obsessive-compulsive disorders: Theory and management* (pp. 118–131). Littleton, MA: Year Book Medical Publishers.
- Lochman, J. E. (1992). Cognitive-behavioral intervention with aggressive boys: Three-year follow-up and preventive effects. *Journal of Consulting and Clinical Psychology*, 60, 426–434.
- Lochman, J. E., & Burch, P. R., Curry, J. F., & Lampron, L. B. (1984). Treatment and generalization effects of cognitive-behavioral and goal-setting interventions with aggressive boys. *Journal of Consulting and Clinical Psychology*, 52, 915–916.
- Lochman, J. E., & Curry, J. F. (1986). Effects of social problem-solving training and self-instruction training with aggressive boys. *Journal of Consulting and Clinical Psychology*, 5, 159–164.
- Lochman, J. E., Lampron, L. B., Gemmer, T. C., Harris, R., & Wyckoff, G. M. (1989). Teacher consultation and cognitive-behavioral interventions with aggressive boys. *Psychology in the Schools*, 26, 179–188.
- Lochman, J. E., Powell, N. R., Whidby, J. M., & Fitzgerald, D. P. (2006). Aggressive children: Cognitive-behavioral assessment and treatment. In P. Kendall (Ed.), *Child and adolescent therapy: Cognitive-behavioral procedures* (3rd ed., pp. 33–81). New York: Guilford Press.
- Lochman, J., & Wells, K. (2002). The Coping Power Program at the middle-school transition: Universal and indicated prevention effects. *Psychology of Addictive Behaviors*, 16, S40–S54.
- Lochman, J., & Wells, K. (2004). The Coping Power Program for preadolescent aggressive boys and their parents: Outcome effects at the 1-year follow-up. *Journal of Consulting and Clinical Psychology*, 72, 571–578.
- Lochman, J., Wells, K., & Murray, M. (2007). The Coping Power Program: Preventative intervention at the middle school transition. In P. Tolan, J. Szapocznik, & S. Sambrano (Eds.), *Preventing substance abuse: 3 to 14* (pp. 185–210). Washington, DC: American Psychological Association.
- Lochman, J. E., White, K. J., & Wayland, K. K. (1991). Cognitive-behavioral assessment and treatment with aggressive children. In P. C. Kendall (Ed.), *Child and adolescent therapy: Cognitive-behavioral procedures* (pp. 25–65). New York: Guilford Press.
- Lonigan, C., & Elbert, J. (Eds.). (1998). Empirically-supported psychosocial interventions for children [Special issue]. *Journal of Clinical Child Psychology*, 27.
- Mahoney, M. J. (1977). Reflections in the cognitive-learning trend in psychotherapy. *American Psychologist*, 32, 5–18.

- March, J. (1995). Behavioral psychotherapy for children and adolescents with obsessive-compulsive disorder: A review of the literature and recommendation for treatment. *Journal of the American Academy of Child and Adolescent Psychiatry*, 34, 7-18.
- March, J. (2004). The Treatment for Adolescents with Depression Study (TADS): Short-term effectiveness and safety outcomes. *Journal of the American Medical Association*, 292, 807-820.
- March, J. S., Frances, A., Carpenter, D., & Kahn, D. (1997). The expert consensus guidelines series: Treatment of obsessive-compulsive disorder. *Journal of Clinical Psychiatry*, 58(Suppl. 4), 1-72.
- March, J. S., & Mulle, K. (1998). *OCD in children and adolescents: A cognitive-behavioral treatment manual*. New York: Guilford Press.
- March, J., Mulle, K., & Herbel, B. (1994). Behavioral psychotherapy for children and adolescents with obsessive-compulsive disorder: An open trial of a new protocol-driven treatment package. *Journal of the American Academy of Child and Adolescent Psychiatry*, 33, 333-341.
- Masia-Warner, C., Nangle, D. W., & Hansen, D. J. (2006). Bringing evidence-based child mental health services to the schools: General issues and specific populations. *Education and Treatment of Children*, 29, 165-172.
- McDonald, L. (1993). Families and Schools Together (FAST). Final Report. Washington, DC: U.S. Department of Health and Human Services, Office of Human Development Services, Administration for Children and Families.
- McDonald, L., Moberg, D. P., Brown, R., Rodriguez-Espiricueta, I., Flores, N. I., Burke, M. P., et al. (2006). After-school multifamily groups: A randomized controlled trial involving low-income, urban, Latino children. *Children and Schools*, 28(1), 25-34.
- Meichenbaum, D. (1971). Examination of model characteristics in reducing avoidance behavior. *Journal of Personality and Social Psychology*, 17, 298-307.
- Mendlowitz, S. L., Manassis, K., Bradley, S., Scapillato, D., Miezitis, S., & Shaw, B. F. (1999). Cognitive-behavioral group treatments in childhood anxiety disorders: The role of parental involvement. *Journal of the American Academy of Child and Adolescent Psychiatry*, 38, 1223-1229.
- Morris, R. J., & Kratochwill, T. R. (1983). *Treating children's fears and phobias: A behavioral approach*. New York: Pergamon Press.
- MTA Cooperative Group. (1999a). A 14-month randomized clinical trial of treatment strategies for attention-deficit/hyperactivity disorder. *Archives of General Psychiatry*, 56, 1073-1086.
- MTA Cooperative Group. (1999b). Moderators and mediators of treatment response for children with attention-deficit/hyperactivity disorder. *Archives of General Psychiatry*, 56, 1088-1096.
- Nock, M. K., Kazdin, A. E., Hiripi, E., & Kessler, R. C. (2007). Lifetime prevalence, correlates, and persistence of oppositional defiant disorder: Results from the National Comorbidity Survey Replication. *Journal of Child Psychology and Psychiatry*, 48, 703-713.
- Ollendick, T. H., & Cerny, J. A. (1981). *Clinical behavior therapy with children*. New York: Plenum Press.
- Ollendick, T. H., & Francis, G. (1988). Behavioral assessment and treatment of childhood phobias. *Behavior Modification*, 12, 165-204.
- Ollendick, T. H., & King, N. (1998). Empirically supported treatments for children

- with phobic and anxiety disorders: Current status. *Journal of Clinical Child Psychology*, 27, 156–167.
- Ollendick, T. H., King, N. J., & Chorpita, B. F. (2006). Empirically supported treatments for children and adolescents. In P. C. Kendall (Ed.), *Child and adolescent therapy* (3rd ed., pp. 492–520). New York: Guilford Press.
- Pediatric OCD Treatment Study Team. (2004). Cognitive-behavioral therapy, sertraline, and their combination for children and adolescents with obsessive-compulsive disorder: The Pediatric OCD Treatment Study (POTS) randomized controlled trial. *Journal of the American Medical Association*, 292, 1969–1976.
- Piacentini, J. C., & Langley, A. K. (2004). Cognitive-behavioral therapy for children who have obsessive-compulsive disorder. *Journal of Clinical Psychology*, 60, 1181–1194.
- Rabian, B., Peterson, R., Richters, J., & Jensen, P. (1993). Anxiety sensitivity among anxious children. *Journal of Clinical Child Psychology*, 22, 441–446.
- Robin, A. L., & Schneider, M. (1974). *The turtle technique: An approach to self-control in the classroom*. Unpublished manuscript, State University of New York, Stony Brook.
- Robin, A. L., Schneider, M., & Dolnick, M. (1976). The turtle technique: An extended case study of self-control in the classroom. *Psychology in the Schools*, 13, 449–453.
- Rosenthal, T., & Bandura, A. (1978). Psychological model: Theory and practice. In S. L. Garfield & A. E. Bergin (Eds.), *Handbook of psychotherapy and behavior change* (2nd ed.). New York: Wiley.
- Seligman, L. D., & Ollendick, T. H. (1998). Comorbidity of anxiety and depression in children and adolescents: An integrative review. *Clinical Child and Family Psychology Review*, 1, 125–144.
- Shure, M. B., & Spivack, G. (1978). *Problem-solving techniques in childrearing*. San Francisco: Jossey-Bass.
- Silverman, W. K., Ginsburg, G. S., & Kurtines, W. M. (1995). Clinical issues in treating children with anxiety and phobic disorders. *Cognitive and Behavioral Practice*, 2, 93–117.
- Southam-Gerow, M. A., & Kendall, P. C. (2000). Emotion understanding in youth referred for treatment of anxiety disorders. *Journal of Clinical Child Psychology*.
- Spivack, G., Platt, J. J., & Shure, M. B. (1976). *The problem-solving approach to adjustment*. San Francisco: Jossey-Bass.
- Stark, K. D. (1990). *Childhood depression: School-based intervention*. New York: Guilford Press.
- Stark, K. D., Hargrave, J., Sander, J., Custer, G., Schnnoebelen, S., Simpson, J., et al. (2006). Treatment of childhood depression: The ACTION treatment program. In P. Kendall (Ed.), *Child and adolescent therapy: Cognitive-behavioral procedures* (pp. 169–216). New York: Guilford Press.
- Swanson, J., Kraemer, H. C., & Hinshaw, S. P. (2001). Clinical relevance of the primary findings of the MTA: Success rates based on severity of ADHD and ODD symptoms at the end of treatment. *Journal of the American Academy of Child and Adolescent Psychiatry*, 40, 168–179.
- Suveg, C., Southam-Gerow, M., Goodman, K., & Kendall, P. C. (2007). The role of emotion theory and research in child therapy development. *Clinical Psychology: Science and Practice*, 14, 358–372.

- TADS Team. (2007). The treatment for adolescents with depression study (TADS): Long term effectiveness and safety outcomes. *Archives of General Psychiatry*, 64, 1132–1144.
- Waters, T. L., & Barrett, P. M. (2000) The role of the family in childhood obsessive-compulsive disorder. *Clinical Child and Family Psychology Review*, 3, 173–184.
- Weiner, B. (1979). A theory of motivation of some classroom experience. *Journal of Educational Psychology*, 71, 3–25.
- Weisz, J. (2004). *Psychotherapy for children and adolescents: Evidence-based treatments and case examples*. New York: Cambridge University Press.
- Weisz, J., McCarty, C., & Valeri, S. (2006). Effects of psychotherapy for depression in children and adolescents: A meta-analysis. *Psychological Bulletin*, 132, 132–249.
- Westen, D., Novotny, C., & Thompson-Brenner, H. (2004). The empirical status of empirically supported psychotherapies: Assumptions, findings, and reporting in controlled clinical trials. *Psychological Bulletin*, 130, 631–663.
- Wilkes, T. C. R., Belsher, G., Rush, A. J., & Frank, E. (1994). *Cognitive therapy for depressed adolescents*. New York: Guilford Press.
- Wood, J. J., Piacentini, J. C., Southam-Gerow, M. A., Chu, B. C., & Sigman, M. (2006). Family cognitive behavioral therapy for child anxiety disorders. *Journal of American Academy of Child and Adolescent Psychiatry*, 45(3), 314–321.
- Woodward, L. J., & Fergusson, D. M. (2001). Life course outcomes of young people with anxiety disorders in adolescence. *Journal of the American Academy of Child and Adolescent Psychiatry*, 40, 1086–1093.
- Zentall, S. S. (1995). Modifying classroom tasks and environments. In S. Goldstein (Ed.), *Understanding and managing children's classroom behavior* (pp. 356–374). New York: Wiley.